

10/648,649

38

I claim:

1. A complex of facilities for iceberg isolation with further production of fresh water, comprising:
 - a technological vessel with a complete set of equipment for towing the doubled roll made of cloth for further embracing the iceberg and maneuvering for its isolation,
 - a cloth itself of a considerable length forming the basis of the cover for embracing the iceberg,
 - a device for connecting the said cloth and corresponding equipment of the technological vessel,
- characterized in that
 - the said cloth of considerable length has the shape of preferable circle and is manufactured of two layers of waterproof, flexible material stable to action of saline water, solar radiation and low temperatures, whereupon the said layers are tightly connected to one another along longitudinal and transverse lines in the form of a net,
 - separate cells of which represent air cushions separated on all the sides from other cushions by channels with flexible air ducts, each of the said air ducts is tightly connected by one end to one cushion,
 - the other ends of all air ducts are led at the cloth edge into a single unit,
 - situated in the point of the cloth edge intersection with its diameter, parallel to an arbitrary row of air cushions,
 - while a towing hook and ends of pipes laid in the said channels up to the central part of the cloth and having an open outlet on one side of the cloth are positioned in a single unit,

10/648, c49

39

whereupon a system of bracing belts in the form of two neighboring concentric circumferences of rings fed through loops is positioned on the other side of the cloth,

and on the cloth edge mainly after equal intervals loops for fastening hoisting cables out of the set of equipment of the vessel are situated.

2. The complex of facilities according to claim 1, wherein the technological vessel is equipped with a helicopter and equipment comprising

a winch and a set of cables,

a towing hook for fastening the towing cable of the device for connecting the said cloth of considerable length,

air pumps for pumping air in / out of the said device for connecting the vessel with the said cloth of considerable length,

water pumps for water pumping out along the pipes of the device for connecting the vessel with the said cloth of considerable length,

as well as apparatuses for determining and processing data of iceberg parameters,

on-board computer with software for controlling air pumps in the regimes of air pumping in / out.

3. The complex of facilities according to claim 1, wherein the device of connecting the vessel with the said cloth,

destined for towing the said cloth and

connecting air and water pumps of technological vessel with air ducts and pipes of the said cloth

is formed by a set of air ducts and pipes equal in number to those contained in the said cloth, packed together with the towing cable into a single elongated flexible construction,

one end of which is connected to the air and water pumps of the technological vessel and its towing hook,
and the other end destined for connection with the said cloth is made detachable,
and the positioning of air duct, pipe and towing hook ends at its butt end corresponds to positions of air duct, pipe and towing hook ends in the unit at the edge of the said cloth.

4. A method of iceberg isolation for further production of fresh water including the following stages:

when meeting the iceberg and the technological vessel towing the cloth of considerable length rolled into a doubled roll consisting of two rolls with a common flat strip,

determining the symmetry line of the iceberg and the line of its intersection with the coastal line of the iceberg with determination of two main points at its opposite coasts,

loading into one of these points of a guiding cable, and a winch and a system of hoisting cables on the top of the iceberg,

connecting of one end of the guiding cable with the winch drum, and the other one with that end of the doubled roll of the cloth which was the rear one during towing,

air pumping from the doubled roll of the cloth positioned horizontally on the water surface up to the condition when

the doubled roll of the cloth is submerged into water in the position close to a vertical one with that end remaining above the water which is connected to the technological vessel.

towing of the doubled roll of the cloth submerged into water by moving the vessel round the iceberg and stopping the vessel on the opposite side of the iceberg,

10/648, 649

41

leveling off of the doubled roll of the cloth with the flat strip facing the iceberg by pumping air into the doubled roll up to it attaining a suspended condition,

- hoisting the guiding cable by the winch with pressing the doubled roll to the underwater part of the iceberg along the symmetry line, after girding the underwater part of the iceberg by the flat strip of the doubled roll along the symmetry line taking out the end of the doubled roll by the guiding cable onto the water surface at the side of iceberg opposite to the vessel,

in turn, according to a given program, air pumping into the rows of air cushions situated on both sides from the flat strip of the cloth doubled roll, leading to widening of the flat strip of the doubled roll by rolls rolling from one another in the opposite directions, girding the iceberg underwater part by a larger part of the cloth from the center in direction of the outer sides of the cloth and floating up the cloth edges on the water surface with surrounding the upper part of the iceberg with a ring and closing it,

tightening bracing belts on the part of the cloth closing the upper part of the iceberg.

5. The method according to claim 4, during which tightening of the bracing belts is carried out for one and the same diameter giving the capacity formed out of the cover an elongated shape decreasing the resistance of the surrounding saline water during the capacity towing to the port of destination.

6. The method according to claim 4, during which mooring of a water tanker (tankers) is carried out to the drifting capacity, filling the tanker (tankers) with fresh water with its further delivery to the port (ports) of destination.

7. The method according to claim 5, during which towing of the capacity to the port of destination is carried out with simultaneous delivery of fresh water by water tanker (tankers) to the port (ports) which the towed capacity is passing.

Applicant and
Inventor

